

REMARKS

Claims 1-15 stand rejected and are pending in the application. The above amendments address the specific points of rejection raised by the examiner as further explained below. It is requested that any other remaining informality, be held in abeyance until prosecution on the merits is completed.

Telephone Interview

The telephone interview with Examiner Edgar on January 12, 2005, is appreciated. Proposed amendments to claim 1 were discussed together with the relation of the amendments to the structure of the Kemp and Ebsary references as well as the Van Berensteyn (USP 763,525) and the Sherwood (USP 2,843,049) reference. No agreement was reached.

Drawings

The enclosed amended drawings that adopt the examiner's kind suggestions. Specifically, the numeral 28 has been changed to --25--in and the numeral 8 has been changed to --18-- in Fig. 1. In Figs. 7 and 8, the lead lines were added to the numerals ``20'', ``48'', ``24''.

Specification

The above amendments correct the informalities in the specification.

Claim Rejections -35 USC § 102

Claims 1, 2, 4, 5, 6, 7, 9, 10, 11, 12, 14 and 15 were rejected as being anticipated by Kemp (U.S. Pat. 2,684,035). Kemp is a pump with pivotally supported impeller blades that accept a fluid from the center of the rotor portion and rotate the fluid out to the exit of the pump. The structure of the Kemp reference does not allow for expansion of the working gas, and thus does not harness power as the disclosed and claimed invention as described in the amended claims. Accordingly, since Kemp does not show the same claimed invention, Kemp does not anticipate the claims as amended.

Claims 1-4 and 6-9 were rejected as being anticipated by Ebsary. However, since Ebsary is a pump, it includes many vanes that do not allow expansion as in the disclosed and claimed invention. Accordingly, since Ebsary is not the same invention, it does not anticipate any of the pending claims.

Claim Rejections -35 USC § 103

Claim 13 was rejected as being obvious under Kemp in view of Ebsary. As indicated above, Kemp and Ebsary are both pumps, and thus each includes numerous vanes that trap fluid and rotate the fluid with the vane in order to impart kinetic energy to the fluid, and thus get it to move downstream. The disclosed and claimed invention include vanes that cooperate with the rotor and

housing to create an expansion chamber that allows expansion of the working gas to do work (pressure times change in volume). To do this the disclosed invention has at most one vane between the inlet and the outlet at any given time. This prevents the trapping of the working gas, and thus allowing expansion. The pumps of Kemp and Ebsary do not function in this manner, and do not suggest that this structure is feasible.

The arrangement of Van Beresteyn requires the use of pressure plates that rob the rotor and motor of kinetic energy and efficiency. The arrangement of the disclosed and claimed invention uses the kinetic energy and inlet pressure of the entering gas with the disclosed novel fin or vane arrangement to allow expansion without incurring the losses of the Van Beresteyn device. Van Beresteyn does not teach or suggest the claimed solution alone or in combination with other references of record.

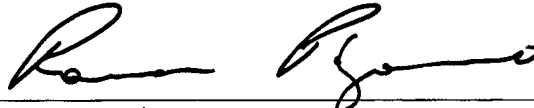
CONCLUSION

In view of the above, it is submitted that the applicant has placed this application in condition for allowance. Further examination, abeyance of any remaining informalities, and reconsideration and withdrawal of the remaining rejections and objections raised in the Examiner's Office Action is requested. Moreover, it is submitted that the claims are now in condition for allowance, and that allowance of the present application is

in order and is also requested.

Should the Examiner deem that any further amendment is desirable to place this application in condition for allowance, the examiner is invited to telephone the undersigned at the number listed below.

Respectfully submitted this 19th day of January 2005,



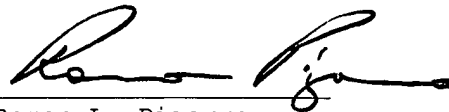
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Ramon L. Pizarro